UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

31625

7590

10/15/2008

BAKER BOTTS L.L.P.
PATENT DEPARTMENT
98 SAN JACINTO BLVD., SUITE 1500
AUSTIN, TX 78701-4039

EXAMINER

D'ANIELLO, NICHOLAS P

ART UNIT PAPER NUMBER

1793

DATE MAILED: 10/15/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.

10/567,995 02/10/2006 Michael Denzler 0713080668 7514

TITLE OF INVENTION: METHOD FOR CREATING AN ELECTRICAL CONTACT FOR A PIEZOELECTRIC ACTUATOR AND POLARIZING THE PIEZOELECTRIC ACTUATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/15/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS; This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

appropriate. All further correspondence including the Patent, advance orders and notificatio indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new maintenance fee notifications.  CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				e: A certificate of	mailing	g can only be used for	r domestic mailings of the
			Fee( pape have	s) Transmittal. The ers. Each additiona e its own certificate	is certif I paper cof mai	icate cannot be used for such as an assignment iling or transmission	or any other accompanying nt or formal drawing, must
31625	7590 10/15	5/2008	nave			e of Mailing or Transı	
	RTMENT TO BLVD., SUITE	1500	I he State addr trans	reby certify that thes Postal Service v	is Fee(	s) Transmittal is being	deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
AUSTIN, TX 78	3701-4039						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/567,995	02/10/2006	•	Michael Denzler			0713080668	7514
TITLE OF INVENTION PIEZOELECTRIC ACTU		ATING AN ELECTRICA	AL CONTACT FOR A PIE	ZOELECTRIC A	CTUA'	FOR AND POLARIZI	NG THE
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	01/15/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
D'ANIELLO, N	NICHOLAS P	1793	228-119000				
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ol>			or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent attorned in the control of the	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.			
PLEASE NOTE: Unl recordation as set forth (A) NAME OF ASSIG	ess an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	T a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assign assignment. and STATE OR C	COUNT	TRY)	ocument has been filed for
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Co	orporati	on or other private gro	oup entity    Government
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Stat	*	· · · · · · · · · · · · · · · · · · ·		1 ' ' (3) (4)		PWTW G 27 OF	EP 1 07( )(0)
••	s SMALL ENTITY state d Publication Fee (if rec		b. Applicant is no long				e assignee or other party in
interest as shown by the r	records of the United Sta	ites Patent and Trademark	Office.			——————————————————————————————————————	- mongare or outer purey in
Authorized Signature				Date			
Typed or printed name				Registration N	lo		
an application. Confident submitting the completed this form and/or suggesti	tiality is governed by 35 I application form to the ons for reducing this bu Tirginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	1.14. This collection is est depending upon the indivite Chief Information Office	imated to take 12 i idual case. Any co r. U.S. Patent and	minutes mment Traden	s to complete, including s on the amount of time park Office, U.S. Depa	by the USPTO to process) g gathering, preparing, and me you require to complete urtment of Commerce, P.O. For Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/567,995	02/10/2006	Michael Denzler	0713080668	7514	
31625	7590 10/15/2008		EXAMINER		
BAKER BOTTS L.L.P.			D'ANIELLO, NICHOLAS P		
PATENT DEPARTMENT 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039		ART UNIT	PAPER NUMBER		
			1793		
			DATE MAILED: 10/15/2008		

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 554 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 554 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	_
	10/567,995	DENZLER ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Nicholas B. D'Aniella	1702	
	Nicholas P. D'Aniello	1793	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in to or other appropriate commun IGHTS. This application is su	his application. If not included ication will be mailed in due course. <b>THIS</b>	re
1. This communication is responsive to 10 February 2006.			
2. The allowed claim(s) is/are <u>1-20</u> .			
3. ☑ Acknowledgment is made of a claim for foreign priority up a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have	.,.,	(f).	
2. ☐ Certified copies of the priority documents have		No	
3. ☑ Copies of the certified copies of the priority do	cuments have been received	n this national stage application from the	
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		reply complying with the requirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give			
5. CORRECTED DRAWINGS ( as "replacement sheets") must	st be submitted.		
(a) including changes required by the Notice of Draftspers	son's Patent Drawing Review	PTO-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date	,		
<ul><li>(b) ☐ including changes required by the attached Examiner'</li><li>Paper No./Mail Date</li></ul>	s Amendment / Comment or i	n the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Info	rmal Patent Application	
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Sur		
3. ☑ Information Disclosure Statements (PTO/SB/08),	Paper No./M 7.	ail Date mendment/Comment	
Paper No./Mail Date <u>2/10/2006</u>			
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material		tatement of Reasons for Allowance	
/Nicholas P D'Aniello/			
Examiner, Art Unit 1793			

Application/Control Number: 10/567,995 Page 2

Art Unit: 1793

## **DETAILED ACTION**

## Allowable Subject Matter

1. Claims 1-20 are allowed. The following is an examiner's statement of reasons for allowance:

2. The prior art such as Kohno et al. (USP 5,196,756) teach a method for producing a piezoelectric actuator and for polarizing the piezoelectric actuator, the method comprising: providing an actuator comprising a piezoceramic layer with two spaced electric contacts (see figure 1), applying the polarizing voltage during a cooling process, and limiting the voltage to a maximum value during cooling of the actuator (see column 3, lines 14-47).

However, the prior art as a whole fails to disclose or obviate a process comprising: heating the piezoelectric actuator up to a soldering temperature during the soldering process for soldering electric conductors to the electric contacts, wherein during the heating process a polarizing voltage is applied to the conductors.

This process of polarizing the piezoelectric actuator during the soldering process is therefore found to be novel and un-obvious, and as this limitation is clearly presented in all of the independent claims all of the claims are allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/567,995 Page 3

Art Unit: 1793

## Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas P. D'Aniello whose telephone number is (571)270-3635. The examiner can normally be reached on Monday through Thursday from 8am to 5pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Ward can be reached on (571) 272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. P. D./ Examiner, Art Unit 1793

/Kiley Stoner/ Primary Examiner, Art Unit 1793